

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

JUL - 6 2016

OFFICE OF COMPLIANCE AND ENFORCEMENT

Reply To: OCE-101

Mr. Brian Anderson Company Energy and Environmental Affairs The Boeing Company P.O. Box 3707, M/C 1W-12 Seattle, Washington 98124-2207

Re: Risk-based Disposal Approval for the Boeing Plant 2 Other Area 11 (OA-11), Additional

Characterization for OA-11 Interim Measures

TSCA ID No. WAD 00925 6819

Dear Mr. Anderson:

This letter constitutes approval under the authority of 40 Code of Federal Regulations (C.F.R.) § 761.61(c) for the sampling and analysis of certain polychlorinated biphenyl (PCB) remediation waste at The Boeing Company (Boeing) Plant 2 facility in Seattle, Washington. More specifically, this approval authorizes Boeing, with respect to the requirements for sampling of PCB remediation waste at 40 C.F.R. § 761.61(c), to conduct characterization sampling and analysis of bulk PCB remediation waste associated with the OA-11 Interim Measure. This letter also documents the United States Environmental Protection Agency, Region 10 (EPA)'s evaluation of those project elements which will be conducted under requirements of 40 C.F.R. Part 761 other than § 761.61(c). This approval and EPA's evaluation of the project under the Toxic Substance Control Act (TSCA) is wholly contingent upon EPA written approval of all phases and aspects of the project pursuant to the Resource Conservation and Recovery Act (RCRA) corrective action Administrative Order on Consent, EPA Docket No. 1092-01-22-3008(h) (Boeing Order, Reference 1).

Background

Boeing is conducting an Uplands Corrective Measure at Boeing Plant 2, located in Tukwila, Washington, pursuant to the Boeing Order. As outlined in the draft Upland Corrective Measures Study Volume X (CMS) submitted under the Boeing Order, Plant 2 has been divided into nine Remediation Areas (RAs). Other Area-11 (OA-11), an area of surface and subsurface soil contamination located near the southwest corner of the Plant 2 facility, is within the boundaries of RA 9. A Draft Focused Corrective Measure Study (FCMS) for OA-11 was submitted to EPA in October 2014 (Reference 2) as required under the Boeing Order.

The RCRA program and Boeing have determined that the corrective measure for OA-11, which primarily consists of excavation of PCB-impacted soil, should be performed in summer 2016 to accelerate its schedule. Accelerating this action will allow Boeing to complete property improvements

¹ All references are documented in Enclosure 1.

necessary for storm water compliance in that part of Plant 2. Because the anticipated work constitutes cleanup of bulk PCB remediation waste under TSCA, EPA has determined that the focused corrective action work at OA-11 should be jointly reviewed and approved under RCRA as an Interim Measure and under TSCA as an RBDA.

Development and implementation of the OA-11 Interim Measure is being conducted in a phased process. While historical characterization data for OA-11 is available and sufficient to establish the general approach for conducting the anticipated interim measures as documented in the letter, Boeing Plant 2 OA-11 Interim Measure, Technical Memorandum Work Plan, Boeing Plant 2 (Reference 3), selected additional data are necessary to refine the vertical and horizontal limits of the cleanup and to provide additional data necessary to establish appropriate segregation and disposal requirements associated with the work. Therefore, this RBDA addresses Boeing's proposal to conduct additional characterization work, as documented in the Technical Memorandum Work Plan dated June 10, 2016 (Reference 4). Based on results of this additional characterization work, Boeing will be revising the draft Interim Measures work plan, which will be reviewed and approved under both the Boeing Order and TSCA. Boeing anticipates constructing the interim measures in August of 2016.

The EPA's Office of Land and Emergency Management (OLEM) policy states that all cleanups should be protective of human health and the environment, which extends to the environmental footprint of cleanup activities. Accordingly, EPA requests that Boeing review Section 6 of the ASTM Standard Guide to Greener Cleanups (Active Standard ASTM E2893) to identify Best Management Practices (BMPs) which may be applicable to the OA-11 cleanup, and implement those practices which Boeing identifies as being feasible to implement. The cleanup completion report required by Condition 3 of this approval should include a section on BMP Documentation, as described in Section 6.6.5 of the ASTM Standard.

This written decision for a risk-based method for the sampling and analysis of PCB remediation waste is based on Boeing's application for a risk-based disposal approval (RBDA) (References 3 and 4), and the documentation identified in Enclosure 1, and is issued to Boeing, the owner and operator of the Plant 2 facility, who has overall responsibility for implementation of this authorized work. All sections of the RBDA application, including those referenced in this approval, are incorporated by reference. In granting this approval, EPA finds that the proposed cleanup and verification of PCB remediation waste, subject to the conditions below, will not pose an unreasonable risk of injury to health or the environment. Boeing shall ensure that activities conducted pursuant to this approval are in full compliance with conditions of the approval. The terms and conditions of this approval are established pursuant to 40 C.F.R. § 761.61(c) and enforceable under TSCA. Any actions which deviate from the terms and conditions of this approval may result in administrative, civil, or criminal enforcement in accordance with Sections 16 and 17 of TSCA, 15 U.S.C. §§ 2615 and 2616.

Conditions

- 1. Boeing is authorized to perform sampling and analysis of bulk PCB remediation waste associated with the Other Area-11 (OA-11), as documented in Boeing's RBDA application (References 3 and 4) and as approved by EPA under the Boeing Order (Reference 1). Sampling and analysis under this approval are expected to be completed by July 31, 2016, to support the anticipated schedule for OA-11 Interim Measures in August 2016. Boeing may request an extension to these dates pursuant to Condition 12.
- 2. Boeing will provide EPA a risk-based disposal approval request pursuant to 40 C.F.R. §761.61(c) no later than thirty days prior to the anticipated start of OA-11 interim measures field construction activities, anticipated to begin in August 2016. This application will include validated results of work conducted pursuant to this additional characterization RBDA.
- 3. This approval will remain in effect with respect to work subject to the requirements of 40 C.F.R. § 761.61 and § 761.79 until issuance of the expected RBDA for OA-11 interim measures. Following completion of such work under the Boeing Order, Boeing may provide a written request to EPA to terminate this approval.
- 4. Boeing is authorized to dispose of bulk PCB remediation waste, including debris, with PCB concentrations < 50 ppm, as well as cleanup wastes as described at 40 C.F.R. § 761.61(a)(5)(v), in a facility permitted, licensed or registered by a State to manage municipal solid waste subject to 40 C.F.R. Part 258, or municipal non-hazardous waste subject to 40 C.F.R. §§ 257.5 through 257.30, as applicable.
- 5. Boeing is authorized to dispose of bulk PCB remediation waste, including debris, with as-found PCB concentrations ≥ 50 ppm in a hazardous waste landfill permitted by EPA under Section 3004 of RCRA, or by a State authorized under Section 3006 of RCRA, or a PCB disposal facility approved under 40 C.F.R. Part 761.
- 6. All equipment and structures that have been in contact with liquid or non-liquid PCB remediation waste subject to this approval must be disposed of or decontaminated following the completion of work under this approval. All disposable equipment or materials must be disposed of in a facility permitted, licensed or registered by a State to manage municipal solid waste subject to 40 C.F.R. Part 258, or municipal non-hazardous waste subject to 40 C.F.R. §§ 257.5 through 257.30, as applicable. Non-disposable equipment and structures must be decontaminated using mechanical means or pressure washing to achieve a "clean debris surface" as defined in 40 C.F.R. § 268.45, Table 1, footnote 3. Water generated from decontamination activities may be decontaminated pursuant to the applicable standards at 40 CFR 761.79(h). Boeing will ensure that any decontamination conducted pursuant to this approval will be conducted in compliance with the requirements of 40 C.F.R. 761.79(e)-(g).
- 7. Boeing will ensure that all field work associated with this project conducted by Boeing or contractors is conducted under written site-specific health and safety plans. Boeing will ensure that these plans document appropriate training and personal protective equipment required for all

- personnel that may be exposed to PCBs during work associated with this project. Boeing will make available copies of such plans to EPA upon request.
- 8. Boeing will ensure that a copy of this approval is provided to contractors responsible for conducting work subject to requirements of the approval. Boeing will ensure that any contracts it issues are consistent with the requirements of this approval. Boeing is responsible for ensuring compliance with this TSCA Risk Based Disposal Approval and all applicable requirements of 40 C.F.R. Part 761.
- 9. Nothing in this approval relieves Boeing of any obligation to comply with the Boeing Order, any other EPA or Ecology administrative action, or any statutory requirements, or rules or regulations applicable to the activities subject to this approval.
- 10. Within seven (7) days following the effective date of this approval, Boeing will provide EPA with written or e-mail notice of its project manager responsible for overall implementation of work subject to this approval. The initial EPA TSCA project manager is identified in Condition 13. The respective project managers will be responsible for timely and routine communication regarding implementation of this approval, including notification pursuant to Condition 11. For matters otherwise reportable to the EPA RCRA project manager under the Boeing Order, concurrent notification via e-mail is acceptable and encouraged.
- 11. If at any time before, during, or after conduct of activities subject to this approval, Boeing possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application) that activities approved herein may pose an unreasonable risk of injury to health or the environment, Boeing must report such data or information via facsimile or e-mail to EPA within five working days at the project manager level, and in writing to the Regional Administrator within thirty (30) calendar days of first possessing or becoming aware of such data or information. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be timely resolved without modification of this Approval. Boeing shall also report in the same manner, new or different information related to a condition or any element of the approved activities if the information is relevant to this approval. EPA may direct Boeing to take such actions it finds necessary to ensure the approved storage activities do not pose an unreasonable risk of injury to health or the environment. Boeing shall follow such direction until written approval is obtained from the EPA that finds the condition(s) requiring such direction no longer poses an unreasonable risk of injury to health or the environment.
- 12. EPA reserves the right to modify or revoke this approval based on information provided pursuant to Condition 11, or any other information available to EPA that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment. Boeing may request modification of this approval by providing a written request to EPA. If the EPA agrees with a request for modification, the EPA will provide written approval to Boeing. Prior to obtaining written approval of a modification request, Boeing shall comply with the existing approval conditions.

13. Submissions required by this approval shall be provided to EPA as follows:

Janis Hastings, Acting Director
Office of Air and Waste
EPA Region 10
1200 6th Avenue Suite 900, MS OAW-150
Seattle, Washington 98101
E-mail: Hastings.janis@epa.gov
Facsimile: (206) 553-8509

With copies to the EPA Project Manager:

Dave Bartus
Office of Air and Waste
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1200 6th Avenue, Suite 900, MS OAW-150
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Should you have any questions or comments, please contact Dave Bartus at (206) 553-2804, or Bartus.dave@epa.gov.

Sincerely,

Edward J. Kowalski,

Director

Enclosures

- 1. References
- 2. Statement of Basis

cc:

Will Ernst

The Boeing Company

Hideo Fujita

Ecology Northwest Regional Office

Enclosure 1 References

- 1) Resource Conservation and Recovery Act (RCRA) Administrative Order on Consent, EPA Docket No. 1092-01-22-3008(h).
- 2) Draft Work Plan, "Uplands Corrective Measures Study Volume X: Corrective Measures Study Report Plant 2, Attachment 1B, Focused Corrective Measure Study for OA-11", Floyd|Snider, dated October, 2014.
- 3) Letter, "Boeing Plant 2 OA-11 Interim Measure, Technical Memorandum Work Plan, Boeing Plant 2, WAD 00925 6819, RCRA Docket #1092-01-22-3008(h)," Brian Anderson, Plant 2 Project Coordinator, The Boeing Company, to Edward Kowalski, Environmental Protection Agency Region 10, Office of Compliance and Enforcement, dated June 9, 2016
- 4) Work Plan, "Technical Memorandum Work Plan," Lynn Grochala, Floyd|Snider to Will Ernst, The Boeing Company, dated June 10, 2016.

Enclosure 2 Statement of Basis

Introduction

Boeing is conducting an Uplands Corrective Measure at Boeing Plant 2, located in Tukwila, Washington, pursuant to the Boeing Order. As outlined in the draft Upland Corrective Measures Study Volume X (CMS) submitted under the Boeing Order, Plant 2 has been divided into nine Remediation Areas (RAs). Other Area-11 (OA-11), an area of surface and subsurface soil contamination located near the southwest corner of the Plant 2 facility, is within the boundaries of RA 9. A Draft Focused Corrective Measure Study (FCMS) for OA-11 was submitted to EPA in October 2014 (Reference 2) as required under the Boeing Order.

The RCRA program and Boeing have determined that the corrective measure for OA-11, which primarily consists of excavation of PCB-impacted soil, should be performed in summer 2016 to accelerate its schedule. Accelerating this action will allow Boeing to complete property improvements necessary for storm water compliance in that part of Plant 2. Because the anticipated work constitutes cleanup of bulk PCB remediation waste under TSCA, EPA has determined that the focused corrective action work at OA-11 should be jointly reviewed and approved under RCRA as an Interim Measure and under TSCA as an RBDA.

Development and implementation of the OA-11 Interim Measure is being conducted in a phased process. While historical characterization data for OA-11 is available and sufficient to establish the general approach for conducting the anticipated interim measures as documented in the letter, Boeing Plant 2 OA-11 Interim Measure, Technical Memorandum Work Plan, Boeing Plant 2 (Reference 3), selected additional data are necessary to refine the vertical and horizontal limits of the cleanup and to provide additional data necessary to establish appropriate segregation and disposal requirements associated with the work. Therefore, this RBDA addresses Boeing's proposal to conduct additional characterization work, as documented in the Technical Memorandum Work Plan dated June 10, 2016 (Reference 4). Based on results of this additional characterization work, Boeing will be revising the draft Interim Measures work plan, which will be reviewed and approved under both the Boeing Order and TSCA. Boeing anticipates constructing the interim measures in August of 2016.

EPA's Evaluation of Boeings Risk-Based Disposal Approval Application

In evaluating Boeing's request for a risk-based disposal approval (RBDA), EPA has considered the following issues:

- Relationship to the RCRA Corrective Action Process
- Summary of TSCA Requirements
- Scope of the requested approval
- Specific elements of the cleanup project

Relationship to the RCRA Corrective Action Process

As noted in the Introduction section, all aspects of cleanup at the Boeing Plant 2 facility are being managed as corrective action under RCRA through the Boeing Order. Pursuant to this authority, Boeing has performed site characterization as necessary to document the nature and extent of contamination in the project area, and has identified OA-11 interim measures necessary to protect human health and the environment. Corrective action under the Boeing Order addresses any hazardous waste as defined in Section 1004(5) of RCRA, which include PCBs.

Summary of TSCA requirements

As discussed in the section "Scope of the Requested Approval," soils, structures and debris within the project area are generally considered to meet the definition of PCB remediation waste, and are subject to the requirements for sampling, cleanup and disposal of PCB remediation waste at 40 C.F.R. § 761.61. Under 40 C.F.R. § 761.61, spills or releases of PCBs may be cleaned up using the self-implementing procedures of 40 C.F.R. § 761.61(a), PCB remediation waste may be disposed of (or in some cases, managed) under the performance-based standards of 40 C.F.R. § 761.61(b), or the sampling, cleanup, storage and disposal of PCB remediation waste may be conducted under a risk-based disposal approval issued by EPA pursuant to 40 C.F.R. § 761.61(c). With respect to the OA-11 additional characterization work and expected interim measures, the self-implementing authority of 40 C.F.R. § 761.61(a) is applicable. However, for purposes of optimizing work requirements and to assist in fully harmonizing the requirements under RCRA and TSCA applicable to this project, Boeing is electing to seek approval of more practicable requirements under the risk-based disposal authority of 40 C.F.R. § 761.61(c). In some instances, decontamination of PCB remediation waste and water that has been in contact with PCB remediation waste may be accomplished according to decontamination standards and authorization at 40 C.F.R. § 761.79.

Scope of the requested approval

Under TSCA, soils and structures within the project scope that have been impacted by PCBs satisfy the definition of "PCB Remediation Waste" at 40 C.F.R. § 761.3. This definition includes the following elements:

- Materials disposed of prior to April 18, 1978, that are currently at concentrations ≥ 50 ppm PCBs, regardless of the concentration;
- Materials which are currently at any volume or concentration where the original source was ≥ 500 ppm PCBs beginning on April 18, 1978, or ≥ 50 ppm PCBs beginning on July 2, 1979; and
- Materials which are currently at any concentration if the PCBs are spilled or released from a source not authorized for use under [40 C.F.R Part 761].

The TSCA regulations include a provision at 40 C.F.R. 761.50(b)(3)(iii) that states:

"The owner or operator of a site containing PCB remediation waste has the burden of proving the date that the waste was placed in a land disposal facility, spilled, or otherwise released into the environment, and the concentration of the original spill."

Boeing's RBDA application does not provide documentation of either the source concentration or the date(s) of spills or releases that have impacted the DSOA project area. In these circumstances, EPA conservatively assumes that all media/materials affected by a spill or release meet the definition of PCB remediation waste, and must be cleaned up and disposed of according to the requirements of 40 C.F.R. § 761.61. On this basis, EPA considers all soils and structures subject to cleanup under the Boeing Order within the OA-11 project area to meet the definition of PCB remediation waste, and subject to requirements of this approval.

Specific elements of the cleanup project

OA-11 project activities subject to the requirements of 40 C.F.R. § 761.61 can be generally divided into the following categories:

- Initial characterization for purposes of defining the nature and extent of contamination;
- Additional characterization to facilitate segregation of materials for disposal and to further refine the excavation limits;
- Developing, assessing, and selecting interim measures alternatives, and selection of cleanup levels:
- Excavation of contaminated soils and structures;
- Conducting post-excavation sampling to verify satisfaction of cleanup levels;
- Final disposal of soils and structures contaminated with PCBs at as-found concentrations ≥ 50 ppm;
- Final disposal of soils and structures with PCBs at as-found concentrations < 50 ppm;
- Backfilling and site restoration;
- Decontamination of structures and equipment in contact with PCB remediation waste during cleanup activities.

The current approval addresses the adequacy of initial characterization work documented in the draft FCMS and RBDA application, provides approval only for activities identified in the first and second bullets, and in part, the fifth bullet. The balance of the project activities enumerated above will be addressed in a subsequent RBDA providing approval for the interim measures themselves, expected to occur in August 2016.

The following section provides an overview and evaluation of each of the project activities in the categories identified above, the specific TSCA regulatory authority that authorizes work within each category, and for work subject to this RBDA, the principle source of requirements used by EPA to establish specific requirements under the RBDA. In presenting this overview, EPA notes that all regulatory requirements identified in the table are in addition to requirements of the Boeing Order.

Initial characterization for purposes of defining the nature and extent of contamination

A general description of past investigations and cleanup activities that have occurred within the project area is provided in the FCMS for OA-11 (Reference 2), as well as a discussion of the nature and extent of PCB contamination as determined from these studies. Characterization of the nature and extent of PCB contamination for purposes of evaluating, selecting, and verifying completion of the sediment and soils remedy has been completed as part of the RCRA corrective action process under the Boeing Order. EPA accepts the results of this work as meeting the no unreasonable risk standard for cleanup of PCB remediation waste under 40 C.F.R. § 761.61(c).

Additional characterization to facilitate segregation of materials for disposal and to further refine the excavation limits

As documented in the Work Plan (Reference 4), existing characterization data provide sufficient details to document the horizontal and vertical extent of PCB contamination, proposed excavation limits, material handling requirements, and post-construction monitoring and verification sampling requirements. Extensive testing of soil in the area of OA-11 shows that PCBs and total petroleum hydrocarbons (TPH) are the chemicals of concern for OA-11. The additional characterization prior to construction proposed in the Work Plan will facilitate construction planning, including waste characterization and profiling, and will assist with further delineation of the excavation limits. EPA accepts the proposed sampling locations, sample collection techniques, and methods of sampling and analysis, including quality control/quality assurance procedures, as meeting the no unreasonable risk standard for cleanup of PCB remediation waste under 40 C.F.R §761.61(c). EPA notes that neither RCRA nor TSCA approval of proposed Final Media Cleanup Standards is being provided at this time – such approval is to be provided as part of final approval of the proposed interim measures. Under TSCA, this approval will be part of the RBDA application that Boeing is expected to provide to EPA following completion of the additional characterization field work and sample analysis.

<u>Developing</u>, assessing, and selecting among remedial alternatives Excavation of contaminated soils and structures

These activities will be developed as part of the RCRA interim measures process, and be documented and approved in the expected RBDA application following completion of the additional characterization field activities.

Conducting post-excavation sampling to verify satisfaction of cleanup levels and backfilling

Soil data collected during this investigation will also be used as post-excavation confirmation samples in areas where post-excavation sidewall verification sample collection cannot be performed due to the anticipated use of trench boxes or other means of sidewall shoring during excavation. More specifically, Boeing has documented that sample locations identified in Figure 3 of the Work Plan (Reference 4) as OA11-DP1-3, OA11-DP11-13, and OA11-DP13-18 will be used as post-excavation verification sampling points. Particulars of sample collection at these locations is documented in Section 1.1.5 of the Work Plan. EPA has determined that, with respect to the enumerated verification sampling locations, final disposal of soils and structures contaminated with PCBs at as-found concentrations ≤ 50 ppm, final disposal of soils and structures with PCBs at as-found concentrations < 50 ppm, and

decontamination of structures and equipment in contact with PCB remediation waste during cleanup activities, will occur. These activities will be developed as part of the RCRA interim measures process, and be documented and approved in the expected RBDA application following completion of the additional characterization field activities.

Discussion of Conditions

1. Boeing is authorized to perform sampling and analysis of bulk PCB remediation waste associated with the Other Area-11 (OA-11), as documented in Boeing's RBDA application (References 3 and 4) and as approved by EPA under the Boeing Order (Reference 1). Sampling and analysis under this approval are expected to be completed by July 31, 2016, to support the anticipated schedule for OA-11 Interim Measures in August 2016. Boeing may request an extension to these dates pursuant to Condition 12.

This condition provides overall authorization for the proposed sampling and analysis work. EPA notes that this approval does not finalize proposed final media cleanup levels (FMCLs) – that will be accomplished through RCRA approval following public notice of the corrective measures Statement of Basis, subsequent to completion of the additional characterization work. EPA believes that the proposed characterization work, including sampling and analysis and associated quality assurance/quality control requirements, are appropriate for the proposed FMCLs, and that the characterization work subject to this approval meets the TSCA no unreasonable risk standard. Should approved FMCLs be substantially different than those proposed, EPA may require new or additional work to be completed as part of approved interim measures, particularly with regard to cleanup verification sampling and analysis activities.

2. Boeing will provide EPA a risk-based disposal approval request pursuant to 40 C.F.R. §761.61(c) no later than thirty days prior to the anticipated start of OA-11 interim measures field construction activities, anticipated to begin in August 2016. This application will include validated results of work conducted pursuant to this additional characterization RBDA risk-based disposal approval.

This condition provides sequential integration of the initial characterization work and corresponding results with finalization of the expected interim measures work plan. The submission required by this condition ensures that the interim measures RBDA application is submitted in a timely manner such that EPA can review the approval to determine if the proposed interim measures meet the no unreasonable risk standard of 40 C.F.R. §761.61(c). The submission required by this condition will also serve as the completion report for the approved additional characterization work.

3. This approval will remain in effect with respect to work subject to the requirements of 40 C.F.R. § 761.61 and § 761.79 until issuance of the expected RBDA for OA-11 interim measures. Following completion of such work under the Boeing Order, Boeing may provide a written request to EPA to terminate this approval.

This condition is established to help fully integrate the additional characterization and expected interim measures RBDA approvals.

- 4. Boeing is authorized to dispose of bulk PCB remediation waste, including debris, with PCB concentrations < 50 ppm, as well as cleanup wastes as described at 40 C.F.R. § 761.61(a)(5)(v), in a facility permitted, licensed or registered by a State to manage municipal solid waste subject to 40 C.F.R. Part 258, or municipal non-hazardous waste subject to 40 C.F.R. §§ 257.5 through 257.30, as applicable.
- 5. Boeing is authorized to dispose of bulk PCB remediation waste, including debris, with as-found PCB concentrations ≥ 50 ppm in a hazardous waste landfill permitted by EPA under Section 3004 of RCRA, or by a State authorized under Section 3006 of RCRA, or a PCB disposal facility approved under 40 C.F.R. Part 761.

Although 40 C.F.R. § 761.61(a) provides similar authorizations for bulk PCB remediation waste generated from self-implementing cleanups, this project is not being conducted under the authority of 40 C.F.R. § 761.61(a). Nevertheless, these methods of final disposal are appropriate for PCB remediation waste to be generated by this project, so EPA is establishing the disposal authorizations in Conditions 8 and 9 under the risk-based disposal approval authority of 40 C.F.R. § 761.61(c). EPA is also including in this provision authorization for disposal of cleanup wastes, such as personal protective equipment and other contaminated equipment associated with sampling activities. Although EPA is including authorization to dispose of bulk PCB remediation waste with as-found PCB concentrations ≥ 50 ppm, it is not expected that the approved sampling activities will generate such materials.

6. All equipment and structures that have been in contact with liquid or non-liquid PCB remediation waste subject to this approval must be disposed of or decontaminated following the completion of work under this approval. All disposable equipment or materials must be disposed of in a facility permitted, licensed or registered by a State to manage municipal solid waste subject to 40 C.F.R. Part 258, or municipal non-hazardous waste subject to 40 C.F.R. §§ 257.5 through 257.30, as applicable. Non-disposable equipment and structures must be decontaminated using mechanical means or pressure washing to achieve a "clean debris surface" as defined in 40 C.F.R. § 268.45, Table 1, footnote 3. Water generated from decontamination activities may be decontaminated pursuant to the applicable standards at 40 CFR 761.79(h). Boeing will ensure that any decontamination conducted pursuant to this approval will be conducted in compliance with the requirements of 40 C.F.R. 761.79(e)-(g).

This condition ensures that all equipment, such as direct push sampling equipment, as well as tools and equipment used for sample handling activities, are appropriately managed.

7. Boeing will ensure that all field work associated with this project conducted by Boeing or contractors is conducted under written site-specific health and safety plans. Boeing will ensure that these plans document appropriate training and personal protective equipment required for all personnel that may be exposed to PCBs during work associated with this project. Boeing will make available copies of such plans to EPA upon request.

This condition helps ensure that approved work is conducted in a safe and protective manner. EPA notes that Boeing has provided EPA with a copy of the health and safety plan as Attachment 3 to the Technical Memorandum Work Plan. Consistent with the approach to health and safety plans adopted under the Boeing Order, EPA is not specifically approving the plan provided as part of the Work Plan.

8. Boeing will ensure that a copy of this approval is provided to contractors responsible for conducting work subject to requirements of the approval. Boeing will ensure that any contracts it issues are consistent with the requirements of this approval. Boeing is responsible for ensuring compliance with this TSCA Risk Based Disposal Approval and all applicable requirements of 40 C.F.R. Part 761.

This condition emphasizes Boeing's responsibility for acts or omissions of its contractors.

9. Nothing in this approval relieves Boeing of any obligation to comply with the Boeing Order, any other EPA or Ecology administrative action, or any statutory requirements, or rules and regulations applicable to the activities subject to this approval.

This condition establishes that this approval under TSCA does not relieve Boeing of any other obligation that it may have with respect to the approved activities.

10. Within seven (7) days following the effective date of this approval, Boeing will provide EPA with written or e-mail notice of its project manager responsible for overall implementation of work subject to this approval. The initial EPA TSCA project manager is identified in Condition 13. The respective project managers will be responsible for timely and routine communication regarding implementation of this approval, including notification pursuant to Condition 11. For matters otherwise reportable to the EPA RCRA project manager under the Boeing Order, concurrent notification via e-mail is acceptable and encouraged.

Based on experience during the first construction season for the Duwamish Sediments Other Areas (DSOA) project previously completed by Boeing under a separate RBDA, EPA and Boeing recognized the need for enhanced communication with respect to this approval based on a project management approach. EPA is establishing this condition, as well as conforming changes to Condition 11 below, to reflect this objective.

11. If at any time before, during, or after conduct of activities subject to this approval, Boeing possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application) that activities approved herein may pose an unreasonable risk of injury to health or the environment. Boeing must report such data or information via facsimile or e-mail to EPA within five working days at the project manager level, and in writing to the Regional Administrator within thirty (30) calendar days of first possessing or becoming aware of such data or information. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be timely resolved without modification of this Approval. Boeing shall also report in the same manner, new or different information related to a condition or any element of the approved activities if the information is relevant to this approval. EPA may direct Boeing to take such actions it finds necessary to ensure the approved storage activities do not pose an unreasonable risk of injury to health or the environment. Boeing shall follow such direction until written approval is obtained from the EPA that finds the condition(s) requiring such direction no longer poses an unreasonable risk of injury to health or the environment.

This condition ensures that if any information not available to EPA at the time this approval is issued becomes known, it will be promptly made available to the EPA for purposes of ensuring that activities subject to this approval continue to pose no unreasonable risk of injury to health or the environment. This condition also ensures EPA's ability to make changes to the storage activities, including withdrawing approval for storage, as necessary to ensure no unreasonable risk of injury to health or the environment.

12. EPA reserves the right to modify or revoke this approval based on information provided pursuant to Condition 15, or any other information available to EPA that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment. Boeing may request modification of this approval by providing a written request to EPA. If the EPA agrees with a request for modification, the EPA will provide written approval to Boeing. Prior to obtaining written approval of a modification request, Boeing shall comply with the existing approval conditions.

This condition establishes a mechanism whereby this approval may be modified by EPA, either independently or upon request to EPA.

Condition 13, not restated here, is self-explanatory.

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